APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/515,310	02/29/2000	John M. Quernemoen	RA-5244	2025

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EXAMINER
DODDS, HAROLD E

ART UNIT	PAPER NUMBER
2177	13

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/515,310	QUERNEMOEN, JOHN M.
	Examiner	Art Unit
	Harold E. Dodds, Jr.	2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>6</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>19 May 2003</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office

action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2.   Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by

Stellwagen, Jr. (U.S. Patent No. 5,835,755) by the following:

"...obtaining at least one user defined workload requirement..." at col. 9, lines 21-23, col.

7, lines 48-51, and col. 8, 39-43.

"...determining the database management system server hardware requirements..." at

col. 9, lines 8-10, col. 1, lines 32-35, col. 4, lines 8-14, and col. 8, 39-43.

"...for the yet-to-be built database management system server..." at col. 8, lines 27-30,

col. 1, lines 32-35, and col. 4, lines 8-14.

"...as a function of said user defined workload requirement..." at col. 4, lines 33-36, col.

7, lines 48-51, and col. 8, 39-43.

"...and outputting said yet-to-be built database management system server

requirements..." at col. 8, lines 63-65, col. 8, lines 27-30, col. 1, lines 32-35, col. 4, lines

8-14, and col. 8, 39-43.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Stellwagen as applied to claim 1 above, and further in view of Yang et al. (U.S.

Patent No. 6,542,854).

As per claim 2, the "...said user defined workload requirement...," is taught by

Stellwagen at col. 7, lines 48-51 and col. 8, 39-43,

Includes a plurality of inputs from a user...," is taught by Stellwagen at col. 7, lines 48-51

and col. 8, lines 39-43,

the "...including a server type...," is taught by c at col. 4, lines 8-14,

but the "...a maximum desired processor utilization..."

and the "...and a transactions per second requirement...," is not taught by Stellwagen.

However, Yang teaches the use of processor utilization and transactions per

second as follows:

"...The following are examples of parameters that can be used to gauge the performance of the system: (a) processor utilization; b) disk utilization; (c) memory utilization; (d) network utilization (e.g., packet rate or connections); (e) required throughout; (f) system capacity/reserve capacity; (g) system queue; (h) response time (e.g., maximum or average); and (i) service time..." at col. 15, lines 45-54.

"...Determine Average transactions per second for the workload */ transaction_rate = #_trans / run_time..." at col. 29, lines 59-60.

"...For example, there has been a need to determine the central processing unit (CPU) requirements, volatile memory requirements (e.g., cache memory or random access memory (RAM)), and mass storage requirements (e.g., hard disk capability) of a computing system that is capable of running a given software application at acceptable performance levels..." at col. 1, lines 13-20.

It would have been obvious to one of ordinary skill at the time of the invention to combine Yang with Stellwagen since Stellwagen and Yang, teach the use of computers, the use of databases, the use of networks, the use of clients, the use of servers, the use of hardware, the use of software, the use of workloads, the use of requirements, and the use of the SQL query language. Stellwagen provides a proposed database management system server and Yang provides parameters for determining the performance of the server.

5.   As per claim 3, the "...said outputs include a number of processors requirement, is taught by Yang at col. 8, lines 26-29,

the "...a memory size requirement...," is taught by Yang at col. 1, lines 13-20,

the "...and a mass storage requirement...," is taught by Yang at col. 1, lines 13-20,

and the "...for the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14.

6.   As per claim 4, the "...said outputs comprise properties...," is taught by

Yang at col. 34, lines 48-50 and col. 2, lines 32-34,

the "...including an expected effective CPU utilization...," is taught by Yang at at col. 33,

lines 10-12 and col. 5, lines 3-8,

the "...for the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14,

and the "...based on the user defined workload requirements...," is taught by Stellwagen

at col. 4, lines 33-36, col. 7, lines 48-51, and col. 8, 39-43.

7.   As per claim 5, the "...said outputs comprise properties...," is taught by

Yang at col. 34, lines 48-50 and col. 2, lines 32-34,

the "...including an expected number of users that can be supported...," is taught by

Yang at col. 30, line 30,

the "...by the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14,

and the "...based on the user defined workload requirements...," is taught by Stellwagen

at col. 4, lines 33-36, col. 7, lines 48-51, and col. 8, 39-43.

8.   As per claim 6, the "...said outputs comprise properties...," is taught by

Yang at col. 34, lines 48-50 and col. 2, lines 32-34,

the "...including an expected effective CPU utilization...," is taught by Yang at at col. 33,

lines 10-12 and col. 5, lines 3-8,

the "...and an expected number of users supported...," is taught by Yang at col. 30, line

30,

the "...by the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14,

and the "...based on the user defined workload requirements...," is taught by Stellwagen

at col. 4, lines 33-36, col. 7, lines 48-51, and col. 8, 39-43.

9.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Stellwagen as applied to claim 1 above, and further in view of Blake et al. (U.S. Patent

No. 6,067,412).

As per claim 7, the "...said user defined workload requirements...," is taught by

Stellwagen at col. 7, lines 48-51 and col. 8, 39-43,

but the "...includes a baseline system transactions per second...,"

the "...and said outputs include a calculated transactions per second value...,"

the "...and a ratio of said calculated transactions per second...,"

the "...to said baseline transactions per second...,"

the ",,,and wherein said determining step determines values...,"

and the "...for said calculated transactions per second and said transactions per second

ratio...," are not taught by Stellwagen.

However, Blake teaches the use of baseline systems, the use of transactions per

second, the use of calculations, the use of values, and the use of ratios as follows:

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"...This information about the performance of the operating
system is preferably generated during the construction of the
model by using the synthetic workload generator to apply known
workloads to a baseline computer system and using the actual
performance measurements as an indication of the operating
system performance..." at col. 9, lines 44-49.
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"...In other words, the disk can handle 2 transactions per
second and the CPU can handle 4 transactions per second..." at
col. 2, lines 6-7.

"...Each entry contains the name of the operating system
characteristic and a value or formula for calculating a
value..." at col. 8, lines 63-65.

"...// Relative__Memory__Size is a property of installed
processor type.
Relative__Memory__Usage: ["ratio"]
Index(Relative__Memory__Size, Installed__Processor__Index -
1)..." at col. 6, lines 62-64.

It would have been obvious to one of ordinary skill at the time of the invention to

combine Blake with Stellwagen since Stellwagen and Blake, teach the use of

computers, the use of databases, the use of networks, the use of clients, the use of

servers, the use of hardware, the use of software, the use of workloads, and the use of

requirements. Stellwagen provides a proposed database management system server

and Blake provides a baseline system for the performance of the server.

10.   Claims 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Stellwagen, Jr. (U.S. Patent No. 5,835,755) and Yang et al. (U.S. Patent No.

6,542,854).

11.   Stellwagen renders obvious independent claim 8 by the following:

"...obtaining from said a user..." at col. 7, lines 48-51.

"...and outputting said total workload to said human user..." at col. 8, lines 63-65, col. 7,

lines 64-67, col. 8, lines 39-43, and col. 1, lines 44-49.

Stellwages does not teach the use of transaction definitions and the computation

of workload contributions.

12.   However, Yang teaches the use of transaction definitions and the computation of workload contributions as follows:

"...a plurality of transactions definitions..." at col. 12, lines 41-43.

"...wherein each of said transactions definitions..." at col. 12, lines 41-43.

"...have a transaction workload contribution..." at col. 12, lines 41-43 and col. 7, lines 34-35.

"...and an expected execution rate per second..." at col. 33, lines 10-13 and col. 10, lines 48-50.

"...calculating a total expected workload..." at col. 16, lines 21-24, col. 14, lines 7-9, col. 33, lines 10-12, and col. 7, lines 34-35.

"...as a function of said transactions definitions..." at col. 4, lines 33-36 and col. 12, lines 41-43.

It would have been obvious to one of ordinary skill at the time of the invention to combine Yang with Stellwagen since Stellwagen and Yang, teach the use of computers, the use of databases, the use of networks, the use of clients, the use of servers, the use of hardware, the use of software, the use of workloads, the use of requirements, and the use of the SQL query language. Stellwagen provides a proposed database management system server and Yang provides transaction definitions and the calculation of expected workloads for determining the performance of the server.

13.   As per claim 9, the "...obtaining a server type from said user...," is taught by Stellwagen at col. 9, lines 21-23, col. 4, lines 8-14, and col. 7, lines 48-51.

14.   As per claim 10, the "...maximum desired processor utilization...," is taught

by Yang at col. 11, lines 66-67 and col. 15, lines 47-54.

15.   As per claim 11, the "...maximum desired network interface card

utilization...," is taught by Yang at col. 11, lines 66-67, col. 15, lines 47-54, and col. 35,

lines 62-65.

16.   As per claim 12, the "...obtaining a server type...," is taught by Stellwagen

at col. 9, lines 21-23 and col. 4, lines 8-14,

the "...a LAN speed...," is taught by Yang at col. 27, lines 21-23,

the "...a maximum desired processor utilization...," is taught by Yang at col. 11, lines 66-

67 and col. 15, lines 47-54,

and the "...maximum desired network interface card utilization...," is taught by Yang at

col. 11, lines 66-67, col. 15, lines 47-54, and col. 35, lines 62-65.

17.   As per claim 13, the "...at least some of said transactions definitions...," is

taught by Yang at col. 12, lines 41-43,

the "...include at least one SQL statement...," is taught by Yang at col. 6, lines 46-48,

the "...wherein each of said transaction workloads...," is taught by Yang at col. 12, lines

41-43 and col. 7, lines 34-35,

the "...is calculated by calculating a workload contribution...," is taught by Yang at col.

16, lines 21-24, col. 12, lines 41-43, and col. 7, lines 34-35

and the "...of each of said SQL statements...," is taught by Yang at col. 6, lines 46-48.

18.   As per claim 14, the "...said SQL statements include insert, delete, update,

and/or select SQL statement types...," is taught by Yang at col. 6, lines 46-48.

19.   As per claim 15, the "...said insert SQL types have parameters...," is

taught by Yang at col. 6, lines 47-48 and col. 6, lines 41-42,

the "...including a number of identical insert statements...," is taught by Yang at col. 11,

lines 35-38 and col. 6, lines 47-48,

the "...and wherein said insert statement SQL workload contribution...," is taught by

Yang at col. 6, lines 47-48 and col. 7, lines 34-35,

the "...is a function of said statement parameters...," is taught by Yang at col. 7, lines 1-

2, col. 6, lines 47-48, and col. 6, lines 41-42,

the "...said delete SQL types have parameters...," is taught by Yang at col. 6, lines 47-

48 and col. 6, lines 41-42,

the "...including a number identical delete statements...," is taught by Yang at col. 11,

lines 35-38 and col. 6, lines 47-48,

the "...and wherein said delete statement SQL workload contribution...," is taught by

Yang at col. 6, lines 47-48 and col. 7, lines 34-35,

the "...is a function of said statement parameters...," is taught by Yang at col. 7, lines 1-

2, col. 6, lines 47-48, and col. 6, lines 41-42,

the "...said update SQL types have parameters...," is taught by Yang at col. 6, lines 47-

48 and col. 6, lines 41-42,

the "...including a number of records to be operated on by said update statement...," is

taught by Yang at col. 15, lines 24-33, col. 29, lines 14-16, and col. 6, lines 47-48,

the "...and wherein said update statement SQL workload contribution...," is taught by

Yang at col. 6, lines 47-48 and col. 7, lines 34-35,

the "...is a function of said statement parameters...," is taught by Yang at col. 7, lines 1-2, col. 6, lines 47-48, and col. 6, lines 41-42,

the "...and said select SQL types have parameters...," is taught by Yang at col. 6, lines 47-48 and col. 6, lines 41-42,

the "...including selectivity criteria...," is taught by Yang at col. 9, lines 50-53 and col. 33, lines 33-34,

the "...and wherein said select statement SQL workload contribution...," is taught by Yang at col. 6, lines 47-48 and col. 7, lines 34-35,

and the "...is a function of said statement parameters...," is taught by Yang at col. 7, lines 1-2, col. 6, lines 47-48, and col. 6, lines 41-42.

20.   As per independent claims 16 and 21, the "...obtaining from a user...," is taught by Stellwagen at col. 9, lines 21-23 and col. 7, lines 48-51,

the "...a plurality of transactions definitions...," is taught by Yang at col. 12, lines 41-43,

the "...wherein each of said transactions definitions...," is taught by Yang at col. 12, lines 41-43,

the "...have a transaction workload contribution...," is taught by Yang at col. 12, lines 41-43 and col. 7, lines 34-35,

the "...and an expected execution rate per second...," is taught by Yang at col. 33, lines 10-13 and col. 10, lines 48-50,

the "...determining a total expected workload...," is taught by Yang at col. 16, lines 21-24, col. 14, lines 7-9, col. 33, lines 10-12, and col. 7, lines 34-35,

the "...as a function of said transactions definitions...," is taught by Yang at col. 4, lines

33-36 and col. 12, lines 41-43,

the "...and determining the database management system server hardware

requirements...," is taught by Stellwagen at col. 9, lines 8-10, col. 1, lines 32-35, col. 4,

lines 8-14, and col. 8, 39-43,

the "...for the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14,

and the "...as a function of said total expected workload...," is taught by Yang at col. 4,

lines 33-36, col. 14, lines 7-9, col. 33, lines 10-12, and col. 7, lines 34-35.

21.   As per claim 17, the "...the database management system server

hardware requirements...," is taught by Stellwagen at col. 1, lines 32-35, col. 4, lines 8-

14, and col. 8, 39-43,

the "...includes a processor type...," is taught by Yang at col. 1, lines 59-63,

and the "...for the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14.

22.   As per claim 18, the "...the database management system server

hardware requirements...," is taught by Stellwagen at col. 1, lines 32-35, col. 4, lines 8-

14, and col. 8, 39-43,

the "...includes number of processors...," is taught by Yang at col. 8, lines 26-29,

and the "...for the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14.

23.   As per claim 19, the "...the database management system server

hardware requirements...," is taught by Stellwagen at col. 1, lines 32-35, col. 4, lines 8-

14, and col. 8, 39-43,

the "...includes 1/O requirements...," is taught by Yang at col. 15, lines 55-63,

and the "...for the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14.

24.   As per claim 20, the "...the database management system server

hardware requirements...," ...," is taught by Stellwagen at col. 1, lines 32-35, col. 4, lines

8-14, and col. 8, 39-43,

the "...includes memory requirements...," is taught by Yang at col. 1, lines 13-20,

and the "...for the yet-to-be built database management system server...," is taught by

Stellwagen at col. 8, lines 27-30, col. 1, lines 32-35, and col. 4, lines 8-14.

Response to Arguments

25.   Applicant's arguments filed 19 May 2003 have been fully considered but

they are not persuasive. In the first argument on page 8, paragraph 2, the Applicant

states:

"During the interview, the Examiner and the Primary Examiner appeared to
acknowledge that the previous rejections were likely improper because they were
based, at least in part, on non-analogous art."

In response to applicant's argument that the previous rejections were based on

nonanalogous art, it has been held that a prior art reference must either be in the field of

applicant's endeavor or, if not, then be reasonably pertinent to the particular problem

with which the applicant was concerned, in order to be relied upon as a basis for

rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443

(Fed. Cir. 1992). In this case, the references used in the previous rejections were

closely related by the teaching of multiple common elements and were highly pertinent

to the proposed invention.

Furthermore, this rejection is based on two new references and a previously used

reference, which are all based on analogous art and teach the use of multiple common

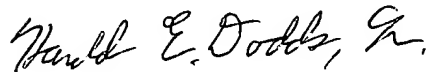elements, which are critical to the proposed invention.

Conclusion

26.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is

(703)-305-1802. The examiner can normally be reached on Monday - Friday 8:00 -

4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John E. Breene can be reached on (703)-305-9790. The fax phone

numbers for the organization where this application or proceeding is assigned are (703)

746-7239 for regular communications and 703-746-7238 for After Final

communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703)-

305-3900.

Harold E. Dodds, Jr.

Harold E. Dodds, Jr.
Patent Examiner
July 24, 2003

GRETA ROBINSON
PRIMARY EXAMINER